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(54) Title: ELEVATOR WIRELESS COMMUNICATION INFRASTRUCTURE USING PICONET MODULES

15 <u>-30</u> 15 (3 48 (57) Abstract: An elevator system has on each floor hall call buttons that are interconnected with piconet modules (15), such as modules conforming to BLUETOOTH_{TM} specifications; similar piconet modules (16) may be associated with hall fixtures such as lanterns and gongs; similar piconet modules (50) may be associated with hoistway doors, on each floor, so as to form a wireless communication system with a similar piconet module (19) at the controller (18); and a piconet module (40) may be associated with the car operating panel. A module (43) may be interconnected with the car door lock switch; a module (44) may be interconnected with a safety switch; modules (48) and (49) may be interconnected with lower and upper limit switches; and a module (49) may be interconnected with an overspeed detector, so as to form a safety chain. A prospective passenger (53) may carry a portable device with a piconet module (54) to request elevator service and receive acknowledgment, and maintenance personnel (58) may use a personal ditigal assistant having a piconet module (58) therein to acquire current and historical information about the elevator and to issue executable commands to the elevator system.